MARS ATMOSPHERIC MODEL CAPABILITIES AND THE PROPER USE OF MODEL OUTPUT DATA

A TWO-DAY SHORT COURSE FOR END-USERS OF MARS ATMOSPHERIC MODEL DATA

September 16-17, 2004
Boulder, Colorado
Southwest Research Institute®

The use of atmospheric model data is becoming increasingly common in many facets of Mars science and Mars mission planning and operations. This short course, presented by prominent Mars atmosphere modelers, is designed for scientists, engineers, and other mission personnel who use the data from these models and would like to more fully understand the origin of the data, its strengths, and its limitations. A background in atmospheric modeling, atmospheric dynamics, or programming is not required or expected; the course is descriptive in nature. Models and data covered in the course include: lower and upper atmosphere general circulation models (GCMs), mesoscale models, and engineering models (*e.g.,* MARS-GRAM).

Upon completion of the two-day course, participants will have a basic understanding of: the different types of atmospheric dynamics models; how the models work; the underlying assumptions in each type of model; and the limitations of the models. Specific examples demonstrating the proper and improper use of model data will be presented.

Scientists who use model data to investigate atmosphere-surface interactions or synthesize model results and geologic features to infer past climate will find the course material highly relevant. Likewise, scientists, engineers, and program managers involved in the design of spacecraft or instruments that are sensitive to the Martian atmospheric environment (*e.g.*, winds) will also benefit from the course.

Space is offered on a first-come, first-served basis. There is a $25 registration fee. Some travel support may be available with preference given to students and junior scientists. Please visit the short course web site: <http://boulder.swri.edu/~rafkin/shortcourse>, or contact Scot Rafkin (rafkin@boulder.swri.edu; 720-240-0116) for more information, including a tentative schedule of topics.

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